

**ARCAM**

DELTA 280 TUNER  
**HANDBOOK**

# Technical specification

FM tuning range	87.5 to 108.0MHz
Tuning system	Phase-locked-loop
Frequency step	50kHz
Presets	20
Sensitivity (IHF)	typically 1.4uV
Alternate channel selectivity	better than 60dB
AM suppression ratio	better than 50dB
Capture ratio	typically 1.5dB
Signal Strength meter	4 segment LED
sensitivity	typically 2uV to 2mV
Frequency response	20Hz - 12kHz +/- 0.5dB
	typically -2dB at 15kHz
Ultimate S/N ratio (CCIR) Mono	
Stereo	better than 75dB
	better than 72dB
Total harmonic distortion 96MHz reference, 22.5kHz deviation at 1kHz	
Mono	better than 0.10%
Stereo	better than 0.30% (using MPX filter)
Channel separation (1kHz)	better than 40dB
Pilot tone suppression	better than 50dB
Output impedance	25ohm
Minimum recommended load	1kohm
Output level	850mV at 75kHz deviation
Power consumption	12VA
Size W/D/H mm.	430 x 230 x 84
Weight	2.2kg nett.
	3.2kg packed.
Supplied accessories	FM dipole aerial
	co-ax plug adaptor
	mains lead
	CR25 Handi-Remote control
	F-Type aerial adaptor



- ⑦ **IF FUNCTION** - When several radio stations are situated close together on the FM frequency band, a station with a strong signal can interfere with a weak adjacent station. In order to receive the weaker station properly, a modified IF (Intermediate Frequency) filter is required. The IF function switches in a narrow bandwidth filter, allowing the Delta 280 to receive the weaker station's signal satisfactorily.

To select the IF function, press the IF button. The IF LED will glow green. To cancel, press the IF button again.

- ⑧ **AUTO** - Selects automatic or manual tuning (see below). The led will glow amber when AUTO is selected. If the led is not lit manual tuning is selected.

- ⑨, ⑩ **▽ Δ** - Press to tune up or down through the FM frequency band. In AUTO tuning mode the frequency display will stop automatically at a station with a suitably strong signal. In manual tuning mode press and hold ▽ or Δ until the desired frequency is displayed.

- ⑪ **DISPLAY** - The FM frequency display, signal strength meter and AUTO LED can be turned off by pressing DISPLAY. To restore the display, press DISPLAY again.

**Please Note:** The two digit preset number display and the other LEDs are not affected by the DISPLAY function.

- ⑫ **STORE** - For storing up to 20 FM stations into the preset memory. To preset stations press STORE and while the led glows red, press the desired preset button.

- ⑬ **SHIFT** - The Delta 280 has two banks of ten presets. Choose the required bank by pressing the SHIFT button. Presets 1-10 can be selected when the SHIFT led is off and presets 11-20 when the led is on.

Note: After pressing SHIFT to change the preset bank it will still be necessary to press the required preset button to change channel.

- ⑭ **SCAN** - Plays approximately 5 seconds of each of the 20 presets in turn. If you wish to continue listening to one of the scanned stations, press the relevant preset button.

Pressing either STORE, Δ (tune up) or ▽ (tune down) will cancel the SCAN function.

- ⑮ **PRESET BUTTONS** - Once all the stations have been preset into the memory, simply press the relevant button to select the desired stations. Use SHIFT when selecting preset stations 11-20.

- ⑯ **POWER** - Switches the unit on and off.

- ⑰ **PRESET DISPLAY** - Displays the preset number of the selected station.

- ⑱ **SIGNAL STRENGTH METER** - Indicates signal strength of the selected station. As several radio stations are available on more than one frequency, use the signal strength meter to help you locate the best position for each station. As a guide, two amber leds and two green leds will give adequate stereo reception. All eight leds will give the best stereo reception with the least possible background noise. In most cases, you will need to use a roof mounted aerial connected to the tuner with a good quality low loss 75ohm co-axial cable to achieve the best results. The simple wire dipole aerial provided is only suitable for reception of strong local stations.

## INSTALLATION

- ① Check that your mains supply voltage agrees with the voltage setting on the rear panel of the unit.
- If your mains supply voltage is different, consult your Arcam dealer.

## MAINS SAFETY

- This product is normally supplied with a moulded mains plug already fitted to the lead. If for any reason the plug needs to be removed, **it must be disposed of immediately and securely**, as it is a potential shock hazard when inserted into a mains socket.
- If the plug is removed then the remaining lead must be rewired as follows:
- The **blue** wire must be connected to the terminal which is coloured **blue** or marked with the letter **N**.
- The **brown** wire must be connected to the terminal which is coloured **brown** or marked with the letter **L**.
- The **green and yellow** wire must be connected to the terminal which is coloured **green and yellow**, or marked with the letter **E** or the safety earth symbol.
- When replacing the fuse in the supplied moulded mains plug, the integral fuse holder/cover must always be refitted.
- **Warning:** This apparatus must be earthed.

## MAINS SUPPLY CONNECTIONS

- ② Insert the IEC line socket of the mains lead fully into the power inlet on the rear panel. Connect the other end to your mains supply.

## AUDIO CONNECTIONS

- ③ **AUDIO OUTPUTS** - Both pairs of outputs are identical. Connect one pair of them to your amplifier's **TUNER** input using a suitable interconnect cable. The other pair can be connected to a hi fi VCR's audio input for recording simultaneous broadcasts (simulcasts) or to a cassette deck for direct recording. Insert the red phono plugs into the sockets labelled 'R' and the other phono plugs into the sockets labelled 'L'.

## AERIAL CONNECTIONS

- ⑤ **AERIAL SOCKETS** - Connect your aerial downlead using the supplied adaptor if necessary. Two aerial sockets are provided, enabling you to use two separate aerial sources eg. for terrestrial FM broadcasts and Cable radio.
- With the aerial selector switch 'IN' only the Aerial One input will be used for all 20 presets.
- ④ With the aerial selector switch 'OUT', Aerial One will be used when preset 1-10 are selected and Aerial Two when presets 11-20 are selected.

## OPERATION

- ⑥ **MONO** - Selects mono or stereo output. The led (light emitting diode) will glow red when mono is selected. If a weak station is received in stereo the background hiss can be reduced by selecting mono.

⑮ **STEREO LED** - Indicates stereo reception. When tuning through the FM frequency band in stereo (auto or manual) inter-station noise and very weak signals are automatically muted. To cancel muting, select mono output (see ⑥ MONO).

⑯ **FM FREQUENCY DISPLAY** - Indicates the frequency of the selected FM station.

■ **PRESET MEMORY BACK-UP** - The preset memory will be retained while the tuner is connected to the mains. If the mains supply is disconnected, the memory will be retained for approximately one week.

■ **REMOTE CONTROL FUNCTION** - The Delta 280 tuner has been designed to work with both the Arcam System Remote and 'Handi-Remote' handsets.

The System Remote accesses all functions except automatic tuning. The 'Handi-Remote' can select presets, turn the display off and control Mono or Stereo mode.

## RADIO INTERFERENCE

■ The Delta 280 tuner is a digital device which has been designed to very high standards of electromagnetic compatibility.

■ **EC COUNTRIES:** This product has been designed to comply with directive 89/336/EEC.

■ **USA:** This product complies with FCC requirements. Please refer to the Hints and Tips booklet if you suspect a radio interference problem.

## SAFETY STANDARD

- This product has been designed to meet the IEC 65 international electrical safety standard.

## FOR YOUR INFORMATION

The BBC publishes a booklet entitled "Radio Transmitting Stations" which contains details of all BBC transmitters in the UK together with other useful hints and tips.

This booklet can be obtained on request by sending a large stamped addressed envelope to:-

BBC Engineering Information,  
White City,  
201 Wood Lane,  
London,  
W12 7TS.

Tel: 01345 010313 (local call rate)

The Radio Authority publishes a booklet which contains details of all independent radio stations. This booklet can be obtained on request by sending a large stamped addressed envelope to:-

Radio Authority,  
Holbrook House,  
14 Great Queen Street,  
London,  
WC2B 5DG.

Telephone: 0171 430 2724

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